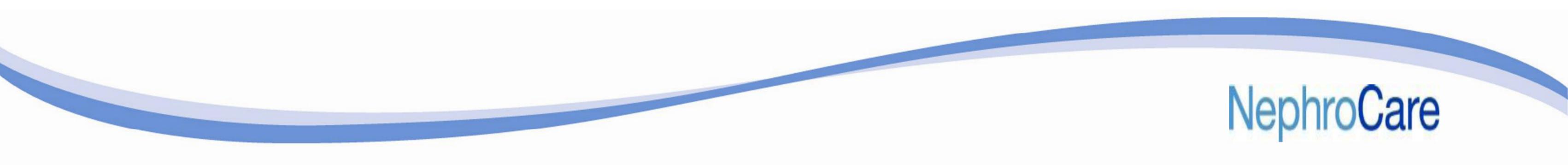# LOOKING FOR CUT-OFF VALUES OF TRANSAMINASES AND OTHER RELATED FACTORS WITH THE HCV INFECTION IN HD PATIENTS.

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INTRODUCTION

The poor symptomatology of primary infection caused by the Hepatitis C Virus (HCV) makes impossible to detect early increases of viral RNA.
This situation generates a window period affecting the HVC infection control.
In addition, antibodies against HCV (anti-HCV) cannot discriminate active infection.
This active status is commonly detected by PCR in a nor cost-efficient way.
Therefore it would be interesting to determine if other indirect methods could allow predicting HCV infection and reducing its current cost effectiveness.

PATIENTS AND METHODS

Retrospective cross-sectional study since January to December 2014. All patients treated in the 59 Spain's Fresenius Medical Care (FMC) facilities, were screened for their inclusion in the study with the following criteria: Adult (>18 years old), prevalent patients (HD for more than 3 months) with at least one serology HCV test performed during the inclusion period.
For all these patients, we collected the following demographic and clinical features from EuCliD® database: Age, gender, HD vintage, GPT, GOT and GTT levels (dated immediate prior to HCV test), CKD etiology, anti-HVC (Elisa test) and PCR-HCV assay.

RESULTS

4090 patients were included in this study. Patients were divided into 3 groups: negative anti-HCV and PCR (n = 3978); anti-HCV positive and negative PCR (n = 37); and double positive (anti-HCV & PCR; n = 75). The GPT and GOT levels compared by ANOVA, resulted significant enhanced in the HVC+/PCR+ group compared with the other two groups. However the GGT levels only showed significant higher levels for the HVC+/PCR+ group compared with the HCV-/PCR-. Receiver operating curves (ROC) were modeled trying to define the possible existence of cut-off values for the concentration of hepatic enzymes and vintage able to discriminate between PCR+ and PCR- patients. This analysis reveals four significant ROC curves (Table1):

ROC curves AUC	GPT		GOT		GGT		Vintage	
AUC	0.877		0.752		0.627		0.615	
95% C.I.	0.834	0.920	0.672	0.831	0.548	0.706	0.535	0.696
P	< 0.0001		< 0.0001		0.0016		0.005	
Higher specificity and sensitivity Cut-off Value	15.00		15.00		23.00		49.00	

CONCLUSIONS

- **An increase of the liver enzymes higher than our new predictive values, accompanied by vintage above our cut off value, suggest a potential VHC infection.**
- **Therefore the data presented here could open new strategies in the HCV infection management, reducing on some occasion PCR determinations.**

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